

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022109**Date Inspected:** 23-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang and Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Segment 12CW (Visual Inspection)

This QA Inspector performed Visual Inspection (VT) for the items listed in the outstanding work (Punch List) after repair/rectification work by ZPMC, during the course of Inspection Mr. Zhang Qiang (ZPMC QC) and Mr. Wei Jian Bo (ABF QA) were present. VT inspection was performed for the following Items numbers (as mentioned in Punch List).

Item No. 360.

Item No. 361.

Item No. 362.

Item No. 363.

Item No. 364.

Item No. 365.

Item No. 366.

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Item No. 367.
Item No. 368.
Item No. 369.
Item No. 370.
Item No. 371.
Item No. 372.
Item No. 373.
Item No. 374.
Item No. 375.
Item No. 376.
Item No. 377.
Item No. 378.
Item No. 379.
Item No. 380.
Item No. 381.
Item No. 382.
Item No. 383.
Item No. 384.
Item No. 385.
Item No. 386.
Item No. 387.
Item No. 388.

The report duly signed by ZPMC QC, ABF QA and Caltrans QA Inspector was submitted to the Caltrans Lead Inspector Mr. Mark Miller and Mr. Art Peterson for review and disposition.

Segment 12AW (Cantilever Bracket)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The weld joint was designated as OBW12C-030. The welder identification was 046709 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-Tc-U4b-FCM-1. The piece mark was identified as Cantilever Brackets welded at Edge Panel at PP 112.5, Cross Beam side.

Please reference the pictures attached for more comprehensive details.

Segment 12BW (Cantilever Bracket)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The weld joint was designated as OBW12C-021. The welder identification was 041713 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-Tc-U4b-FCM-1. The piece mark was identified as Cantilever Brackets welded at Edge Panel at PP 114.5, Cross Beam side.

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Please reference the pictures attached for more comprehensive details.

Segment 12BE (Cantilever Bracket)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The weld joint was designated as OBE12C-021. The welder identification was 044504 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-Tc-U4b-FCM-1. The piece mark was identified as Cantilever Brackets welded at Edge Panel at PP 114.5, Cross Beam side.

Please reference the pictures attached for more comprehensive details.

Segment 12CE (Cantilever Bracket)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) weld. The weld joint was designated as OBE12C-029. The welder identification was 067752 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-Tc-U4b-FCM-1. The piece mark was identified as Cantilever Brackets welded at Edge Panel at PP 114.5, Cross Beam side.

Please reference the pictures attached for more comprehensive details.

Segment 12AE (Deck Panel I-Rib Stiffeners, hold back weld)

This QA Inspector observed the repair fillet welding by Shielded Metal Arc Welding (SMAW) process. The Weld joint was designated as DP3011-001-015. The welder identification was 052910 and observed welding in the 4F (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G(4F)-FCM-Repair-1. The piece mark was identified as Deck Panel I-Rib hold back weld, Bike Path side at PP 111.

Please reference the pictures attached for more comprehensive details.

Segment 12AE to Segment 12BE (Blasting)

This QA Inspector observed ZPMC personnel performing the blasting activities at Transverse splice between PP 112.5 to PP 113 at Segment 12AE to Segment 12BE, Side Panel (Cross Beam and Bike Path) side and Bottom Panel.

Please reference the pictures attached for more comprehensive details.

Segment 12AE to Cross Beam # 17 (Match Drilling)

This QA Inspector observed ZPMC personnel performing the match impression drilling between Segment 12AE, Bottom Plate to Cross Beam # 17 between PP 110, PP 111 and PP 112.

Please reference the pictures attached for more comprehensive details.

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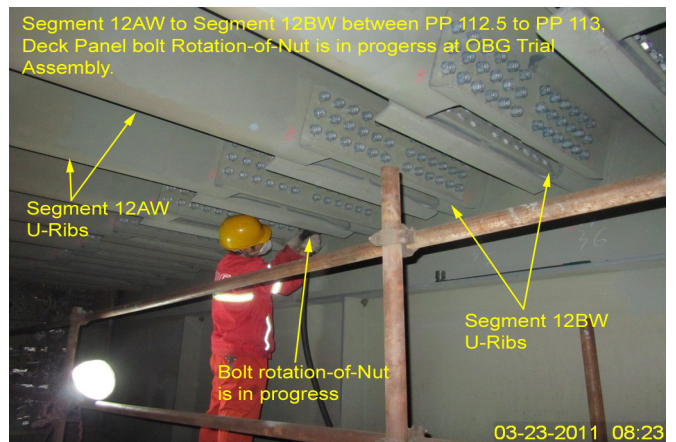
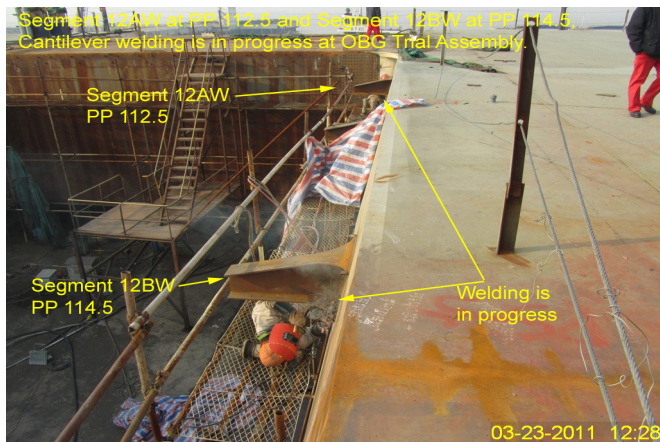
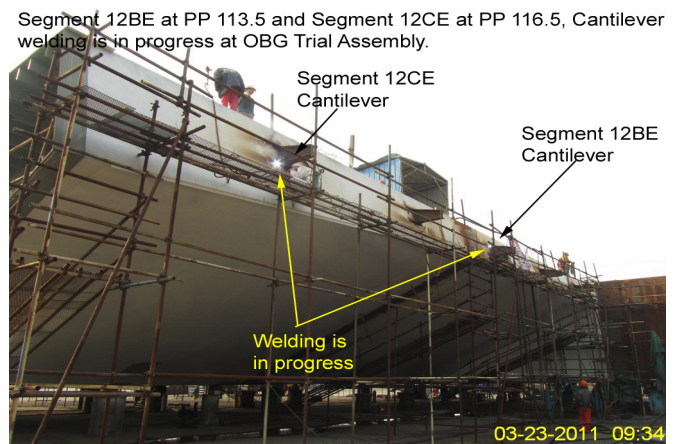
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Segment 12AW to Segment 12BW (U-Rib Rotation-of-Nut)

This QA Inspector observed ZPMC personnel performing the bolts final rotation-of-nut for the bolts connecting U-Rib to U-Rib between PP 112.5 to PP 113 at Segment 12AW to Segment 12BW.

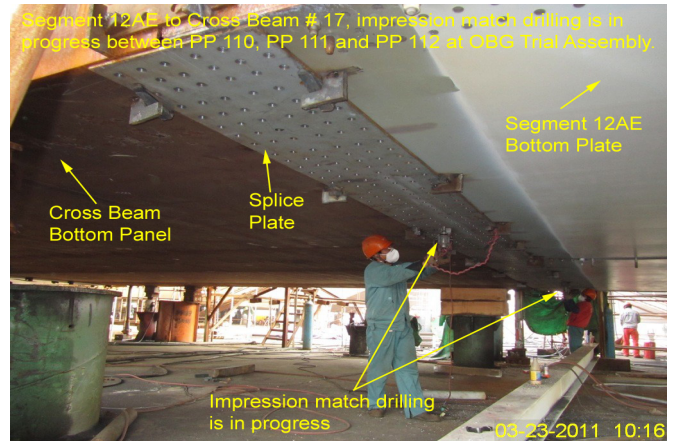
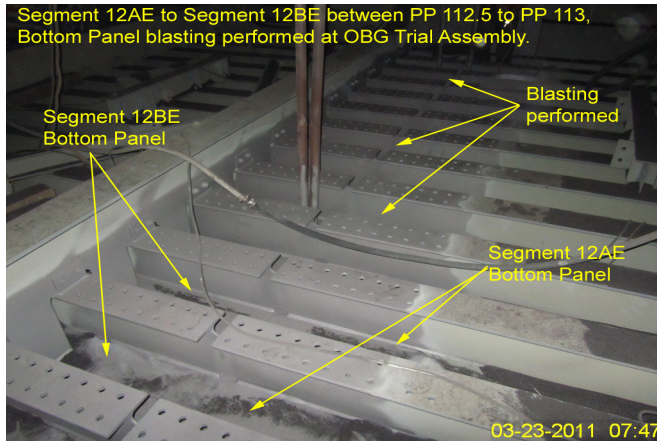
Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer